ABSTRACT OF THE DISCLOSURE

[87] Multiple encryption in a multi-band multi-protocol hybrid wired/wireless network may include receiving on a first PHY channel of an access point, a request for initiation of a communication session from an originating access device. The received request may be acknowledged on the first PHY channel and the originating access device may be authenticated on a second PHY channel. One or more encryption/decryption keys may be provided for use during the communication session. A third PHY channel or the first or second PHY channels may host the communication session. The authentication information may be requested and delivered to the originating access device via a second PHY channel. The encryption key may be delivered to the originating access device via the first PHY channel or the second PHY channel. Additionally, information may be tunneled over a virtual channel established between the originating and a terminating access device.